Maryland Historical Trust

Maryland Inventory of Historic Properties Number: WA-III-Z64 Name: WOOG Example Color Col			
MARYLAND HISTORICAL TO Eligibility Recommended	gibility Not RecommendedX		
Reviewer, OPS:Anne E. Bruder	Date:3 April 2001 Date:3 April 2001		

Maryland Inventory of Historic Properties Historic Bridge Inventory Maryland State Highway Administration
Maryland Historical Trust

Maryland Historical Trust
SHA Bridge No. 21049 Name: MD 844 over Beaver Creek
<u>Location:</u> Street/Road Name and Number: <u>MD 844 (Cavetown Church Road)</u>
City/Town: Smithsburg Vicinity X
County: Washington
Ownership: X State County Municipal Other
This bridge projects over:RoadRailway_X_WaterLand
Is the bridge located within a designated district: _yes X_no
_NR listed district_NR determined eligible district _locally designated_other Name of District
Bridge Type:
Timber BridgeBeam BridgeTruss-CoveredTrestleTimber-and-Concrete
_Stone Arch
_Metal Truss
_Movable Bridge _Swing _Bascule Single Leaf_Bascule Multiple Leaf _Vertical Lift_Retractile_Pontoon
Metal GirderRolled GirderRolled Girder Concrete EncasedPlate GirderPlate Girder Concrete Encased
_Metal Suspension
_Metal Arch
_Metal Cantilever
X Concrete X Concrete Arch Concrete Slab Concrete Beam Rigid Frame
_Other Type Name

Describe Setting:

Bridge 21049 carries MD 844 over Beaver Creek in Washington County. MD 844 runs east-west over the southern flowing Beaver Creek. The area immediately adjacent to the bridge has light residential development.

Describe Superstructure and Substructure:

Bridge 21049 is a single-span filled concrete arch. The length of the bridge is 27 feet and has a 22-foot clear span. The spandrel wall has a 2-inch cove molding around the arch. The spandrel walls are approximately 5 feet high and 5 feet wide. The bridge has a rise of approximately 5 feet 4 inches from springline to the crown. The abutments are approximately 11 feet wide and 2 feet high. There is a clear roadway width of 11 feet 7 inches, with an overall width of 13 feet 7 inches. The bridge has a single w-beam attached to the bridge with metal posts. According to a 1997 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 63.5.

There are fractures located in the spandrel walls and run parallel to the barrel of the arch. These cracks are open up to 1 inch with a slight wall misalignment of ¼-inch. Additionally, the spandrel walls and wingwalls exhibit moderate surface scaling with exposed aggregate. The tops of the spandrel walls are heavily scaled. The arch is concrete exhibiting only light deterioration. There is efflorescence spilling through the joint between the bottom of the arch and the west abutment. Both abutments have heavy efflorescence and a few fine irregular cracks throughout.

Discuss Major Alterations:

At an unknown date the original parapets were replaced with w-beam guardrails.

When Built: circa 1900 Why Built: Unknown

Who Built: State Roads Commission

Who Designed: Unknown Why Altered: Safety concerns.

Was this bridge built as part of an organized bridge building campaign? There are no records to determine when and why this bridge was built.

Surveyor Analysis:

This bridge may have NR significance for association with:

_A Events _Person _C Engineering/Architectural

This bridge does not have National Register significance due to the replacement of its parapets and the generally poor condition of the bridge.

Was this bridge constructed in response to significant events in Maryland or local history?

No records exist for this bridge explaining when and why it was built. The State Highway Administration estimates its construction date as 1900, however, this bridge resembles other concrete arch bridges built by the State Roads commission around 1915..

Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district?

No, this bridge is not located in an area that is eligible for historic designation.

Is the bridge a significant example of its type?

No, this bridge is not a significant example of its type. This bridge is similar to those structures built in the first 2 decades of the twentieth century. However, its present condition and its lack of original parapets lower its value as a good example of a type.

Does the bridge retain integrity of the important elements described in the Context Addendum?

No, this bridge does not retain the integrity of its character defining elements. The spandrel walls are extremely deteriorated and misaligned. The wingwalls and abutments are heavily scaled and spalling. The original parapets are missing.

Is this bridge a significant example of the work of the manufacturer, designer and/or engineer?

No, this is not a significant example of the work of a manufacturer, designer, or engineer.

Should this bridge be given further study before significance analysis is made and why?

No this bridge should not be given further study.

Bibliography:		
County inspection/bridge filesOther (list):	SHA inspection/bridge files	_X
Other (list):		

Johnson, Arthur Newhall

The Present Condition of Maryland Highways. In *Report on the Highways of Maryland*. Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

P.A.C. Spero & Company and Louis Berger & Associates

Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

State Roads Commission

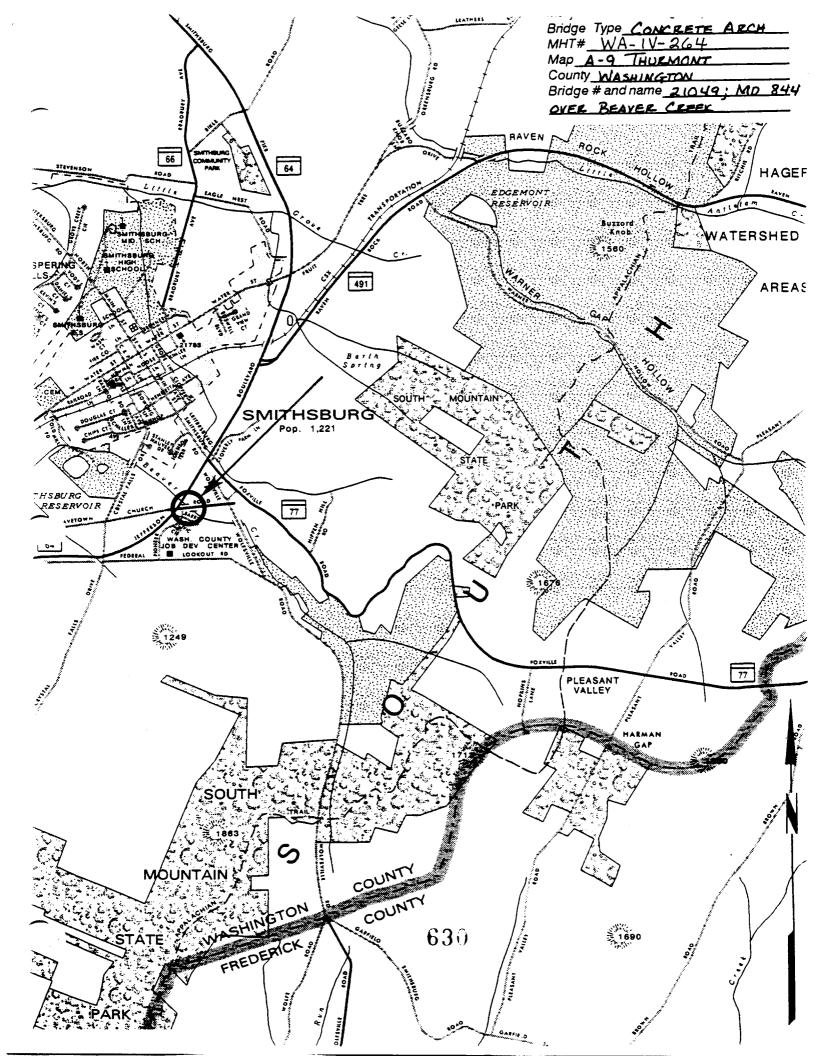
1958 A History of Road Building in Maryland. State Roads Commission of Maryland, Baltimore, Maryland.

Tyrrell, H. Grattan

1909 Concrete Bridges and Culverts for Both Railroads and Highways. The Myron C. Clark Publishing Company, Chicago and New York.

SURVEYOR:

Date bridge recorded _	December 1997	
Name of surveyor <u>Wall</u>	lace, Montgomery & Associates / P.A.C., Spero & Company	
Organization/Address_	P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204	
Phone number(410) 296	6-1635 FAX number (410) 296-1670	





WA-IV-264
BE # 21049(O

NER BEAVER (REEK

WASHINGTON 10., MD.

DAVID KING

2/23/95

S. H. A

WEST APPROACH

1 OF 3



BR# 2104910 WA-1V-264 CULR BEAVER CREEK WASHINGTON CO., MD DAVID KING 2/23/95 S. H. A SOUTH ELEVATION (UTSTREAM)

2 OF 3



WA-1V-264 BR# 2104910 OVER BEAVER CREEK WASHINGTON (O., MD. DAVID KING 2/23/95 S. H.A. NORTH ELEVATION (DOWNSTREAM)

3 OF 3